## REMARKS

Applicants, by the amendments presented above, have made a concerted effort to present claims which more clearly define over the prior art of record, and thus to place this case in condition for allowance. Currently, claims 1-17 and 19-36 are pending.

### *Claim Rejections - 35 U.S.C. §103*

Claims 1, 2, 11, 20, 21 and 36 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over United States Patent No. 6,349,722 to Gradon. Claims 1, 2, 11-17, 19, 20 and 36 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over United States Patent No. 6,050,260 to Daniell et al. Claims 3-10 and 21-35 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Daniell et al. '260 in view of United States Patent No. 5,558,084 to Daniell. Reconsideration of these rejections in view of the amendments and the remarks made herein is requested.

Gradon, Daniell et al '260 and Daniell et al '084 relate to a species loosely termed "closed loop or feedback control". In the case of such respiratory humidifiers, a number of control variables may be chosen. In the present case, the parameter relating to either temperature or humidity on delivery to the patient, i.e. at or close to the mask or other delivery device attached to the patient, as within predefined limits depending on the treatment prescribed. Gradon, Daniell et al '260 and Daniell et al '084 specify the use of some form of temperature or humidity sensor at or adjacent the patient end of the delivery conduit to provide the necessary feedback signal. The present invention provides for open loop control i.e.: attempting to achieve a delivery temperature/humidity without a patient end sensor and therefore without closed loop feedback of the delivered temperature/humidity at the patient end.

Independent claims 1, 19 and 36 also specify that an indication of the temperature within the conduit provides a control input for the humidifier such that the level of humidity delivered by the humidifier is at least dependent on the temperature within the conduit as opposed to at its end. As discussed generally, Gradon, Daniell et al '260 and Daniell et al '084 control based on at least the patient end gas temperature at the extremity of the delivery conduit or delivery interface. As such, when used in conjunction with a conduit heater wire to avoid condensation, because the heater wire will generally stop somewhat short of the end of the conduit (to avoid any possibility of contact with the patient and consequent burns), it is possible that in no or low flow conditions that a bolus of hot humid air could be generated and not identified by the patient end sensor while the no or low flow condition exists. Thus, when normal flow conditions recommence, the bolus of hot air could then be inhaled by the patient with the possibility of dangerous burns to the respiratory tract being the result.

The improvement provided as claimed by independent claims 1, 19 and 36 is that by providing an indication of the temperature within the conduit (as opposed to at the patient) of the respiratory gases, such dangerous conditions can be avoided.

Applicants note that in the Office Action, the Examiner stated that, for example "Gradon et al does not explicitly shows each of the parameter determining steps". This is as a consequence of the fact that the prior art has no need of determining parameters since the control variable is sensed directly and used as feedback to close loop control that parameter to a set value or within a set range. In low or no flow conditions, in fact, such prior art strategy is not as effective as the improvement provided by the present invention.

Therefore, Applicants submit that Gradon, Daniell et al '260 and/or Daniell et al '084 do not disclose or suggest all of the features specified in independent claims 1, 19 and 36.

Reconsideration and withdrawal of the rejections is requested. Allowance of the claims is requested.

Claims 2-17 are dependent upon claim 1 which Applicants submit is in condition for allowance; and claims 20-25 are dependent upon claim 19 which Applicants submit is in condition for allowance. Therefore, Applicant submit that claims 2-17 and 20-35 are allowable. Reconsideration and allowance of claims 2-17 and 20-35 is respectfully requested.

***Specification***

Applicants have amended the priority claim to correctly specify the specifics of the parent application Serial No. 09/959,226. This was effected pursuant to a telephone call with Mr. Harry Kim of the PCT Branch of the United States Patent and Trademark Office once it was realized that the PCT application was claimed as a foreign priority claim. Applicant submits that there is no prejudice caused by such an Amendment because the prior application and date were correctly identified and that no fee is due. Applicants will submit a request for correction of the Filing Receipt once the Examiner acknowledges that this amendment is acceptable.

Applicants have resubmitted the amendments which comprised the new paragraphs following line 29 on page 6 provided in the Amendment of September 18, 2003 to ensure entry. Applicants had previously submitted an underlined version of the added paragraphs. Applicants hereby submit a copy of the added paragraphs without underlining.

A Petition for a Two-Month Extension of Time is concurrently submitted herewith to extend the date for response up to and including May 19, 2004.

In view of the above Amendments and Remarks, Applicant respectfully submits that the claims of the application are allowable over the rejections of the Examiner. Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

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